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SCAFFOLDING ORAL LANGUAGE FOR ELEMENTARY ENGLISH LEARNERS IN CONTENT CLASSROOMS

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by

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CHAPTER ONE

Introduction

My research question

As an elementary classroom teacher who works with English learners in a bilingual international school setting in Colombia, where students are expected to use English in almost all of their academic classes throughout the day, I have found it challenging to address the unique language needs of all of my English learners. In addition, as a teacher of 26 English learners, I know it is my job to provide my young English learners with language instruction that supports their production of oral language in content classes such as social studies, math, and science. I know that when learning a new language, students tend to quickly acquire language that is more commonly used, but struggle to learn and use the more complex and specific academic language that is necessary in content classrooms such as science or social studies. These considerations led me to my research question: *What strategies could be provided to content and English as a Second Language (ESL) teachers to help scaffold oral language use for English Learners in the elementary content classroom?* By exploring this question, I have determined effective practices to support proactive unit planning which incorporates both language instruction and the academic content of the unit. My hope is that the curriculum resources I have created and shared within this project will serve others who work with young English learners in the content classroom, no matter the type of setting they work in.

The setting of the school for this project is a medium sized city in Colombia. Colombians are culturally very social. They typically come from big, close-knit families and thrive off of social interactions. Adults and children alike seem to never stop talking and even often talk over one another. My first graders are no different in that they are incredibly social and they crave interactions with their peers and adults. At my school, students are expected to use English in their homeroom classrooms. However, because of their desire to get out their ideas, it can be a challenge to ensure that they are using English to communicate with one another, especially among their monolingual peers. It is even more difficult for them to communicate in English with others about academic topics because they simply do not have the tools to do so.

In this chapter, I share about the personal and professional experiences that have led me to the curriculum development project I've undertaken, which includes a unit plan and a variety of language scaffolding resources that can be used by teachers who work with young language learners in a variety of settings.

Personal and Professional Relevance of the Project

This project has personal and professional significance for me because the students at my school in Colombia are almost all English learners attending a bilingual school, where they are expected to use English for all of their core subjects throughout the school day (reading, writing, phonics, math, science, and social studies). In all their classes, students are expected to meet standards that have high linguistic demands. In order to meet the expectations the school lays out for them, students need to be provided with language instruction within every content class in order to ensure that the content is

accessible and that they are able to effectively use it in various contexts. Academic standards in courses such as science and social studies have particularly high language demands. Language learners need to be provided with support in the form of language scaffolds in order to access those standards and perform the skills they need in order to be successful communicators.

Personal journey

There are two primary elements of my personal journey that have led me to the project I am undertaking with this capstone: my experience as a second language learner and my experiences in education over the past 14 years.

Unlike my students who have had the opportunity to learn a new language from a very young age, I began my second language learning experience as a teenager when I took high school Spanish classes. I loved my Spanish classes so much that I continued my studies of Spanish in college, spent a semester studying abroad in Peru, and ultimately completed a major in Spanish studies. I truly fell in love with the language, linguistics, and everything about the culture of Spanish speaking places. I became incredibly motivated to learn as much as I could; the nuances of linguistic differences from place to place and learning the lyrics and the rhythms of dance from Spanish speaking countries thrilled me. I met people who I could interact with, I took jobs for which I needed to use my Spanish. I simply couldn't get enough and I yearned to live abroad where I could delve further into my fascination for culture and language. After college, I ended up living in Spain for a year, where this fascination for language and culture continued to grow. Many years later, I am living abroad again, this time in the

beautiful country of Colombia. This motivation that I had fostered in myself as a young adult led me to achieve the advanced level of language skills that I currently possess. It has been a long journey and I know it is quite different from the journey my language learning students are on.

Since I learned my second language much later in life than my students, I had different motivators in pursuing second language proficiency. Because my students are not living in a society that widely utilizes English, they have little to no motivation to seek proficiency in English. Much of their motivation comes from their parents' expectations that they speak another language, but they personally do not see the benefits of bilingualism. Despite these considerations of motivation, I feel that my understanding of my students' first language and culture is a major asset as I serve as their teacher and primary English instructor.

Since my undergraduate years I have been very much involved in the field of education, with students and their families in various positions. I have worked as a tutor, an assistant in early childhood and in elementary classrooms, a substitute teacher, a translator and an administrative assistant at a public school all before becoming a licenced teacher. I also spent a year living and serving as a bilingual assistant at a school in Spain, which was the point at which I decided to pursue my first teaching license. In all of these roles, I have noticed the immense language load that is required in content classrooms. Every class I have worked with that has included language learners has students of varying language proficiency levels. These students need to be met where

they are at; they need to be provided with the necessary tools to communicate about the content they are learning about in their classrooms.

My Teaching Experience

My teaching experience has been an interesting journey. I started as a middle school Spanish teacher, which I did for just one year. While in that position, I learned that my real passion was in teaching young language learners. Because of this, after that first year I went back to school to work towards another license in teaching ESL. I spent about half of the school year working as a substitute teacher and, after working in several Spanish immersion schools in this position, I found that I was really passionate about working in language immersion settings. I was offered a full time teaching position in a first grade classroom at a Spanish immersion school for the remainder of the school year and was rehired for the following school year. This experience helped deepen my understanding of the language demands on students, especially in their content classrooms. No matter if the students in a class are learning the content in Spanish or English or any other language, they need to be guided in how to communicate effectively about the content and to be able to meet the standards of that subject area.

After my second year of teaching Spanish immersion, I decided to pursue teaching in an international setting. I was hired at my current school where I teach first grade to a class of 26 English learners in Colombia. In my third year at my school, I moved to teaching third grade; I was excited to have the opportunity to work with many of the students that were in my class in first grade. The switch to third grade made me feel excited because I knew that students would be more independent learners and have a

higher proficiency level in English. I am incredibly passionate about teaching language, especially to young learners. I think my expertise in second language acquisition definitely has been a key in helping me succeed as a classroom teacher and I look forward to continuing to grow in my skills as an educator.

Capstone Context and Rationale

The setting of this capstone project is a private bilingual school in a medium sized city in the mountains of Colombia. The school serves students from 1 year old through 12th grade. The project will be carried out with third grade students in my classroom during the 2020-2021 school year. The families whose students attend the school are almost entirely from the highest socio-economic strata of the city. In this community, such individuals care about image and prestige, which is what this school provides. The school is growing and developing, with ambitious expansion projects under way. It is focused on providing rigorous, bilingual education, utilizing the latest educational philosophies from preschool and beyond. The majority of families in the school community are Colombian or at least claim Spanish as their primary language. Students begin learning English in Kinder 5, which is essentially kindergarten for 5-year-olds. Throughout primary, or grades 1 through 5, they are expected to learn and use English as the primary academic language. However, because most students speak Spanish as their first and primary language, Spanish is the language they use socially.

Learning English in an international school setting such as the school that is the setting of this project has unique challenges, which have helped to guide the development of the project described in this paper. According to Guthrie (2003, p. 183), factors such as

interest in learning the second language (L2), value of the L2 to the learner, social influences such as opportunities to interact with speakers of the L2, along with the learner's age and the social status of learning the L2 can all affect the process of learning a second language.

In the case of the setting of this project, some of these challenges are manifested in the fact that the school community is largely monolingual/monocultural. This means that students are not socializing with individuals from other places that speak other languages, which greatly reduces opportunities for them to use their language learning in an authentic way. In a bilingual international school setting typically about 4 to 5 classes per day are in English, while the rest of the day is spent using their native language. In addition, many English learners in an international environment have limited English language development support at home. At best, some students may have parents or siblings who understand English, but without motivation or a need to speak it at home, opportunities to practice their language learning are diminished.

Another challenge for students in international school settings is that they are learning in a tutored, not naturalistic environment. They learn in an environment in which the language being acquired is used in instruction (tutored), but not consistently used in social situations or amongst peers (naturalistic) meaning that students have limited exposure to the language (Alptekin, 2007). Even if a teacher is a native English speaker, students are not "forced" to use English with peers when they are playing or spending time together outside of class. Students who are being taught a language and use it in

their classes but who are not speaking the language in other settings will have a limited knowledge and vocabulary set with that language (Alptekin, 2007).

Additionally, when living in a place where everyone speaks your language and very few people in the community speak other languages, there are few natural opportunities to practice the language being learned while out in the greater community. In comparison to English learners living in a community where the majority of individuals speak English (for example, in the U.S.), individuals learning a language while living in their own community have much fewer opportunities to practice the language skills they are learning. One must seek out language practice opportunities, such as language groups or make friends who are native speakers. For young children, these opportunities can be even fewer. Fortunately, students who attend international schools such as the one I work at have the economic means to travel frequently and have the opportunity to practice their language while visiting places where English is spoken or is lingua franca.

Individuals who belong to the same linguistic and cultural group are less likely to interact using their second language in social settings. As someone who learned a second language myself, I understand this phenomena well. It feels awkward and unnatural to speak a new language with peers who share the same first language. The level of comfort in socializing in their second language may change depending on several factors: language proficiency in their second language, presence of a peer whose dominant language is the rest of the group's second language, and, again, motivation for the use of the second language (Guthrie, 2003). This aspect of level of comfort in the use of

language among peers poses a challenge for learners in an environment such as the one I teach in.

Finally, students' motivation to learn English is a major factor that affects their language acquisition in this educational environment; students simply do not have the same types of motivation to learn English as someone living in an English speaking environment such as the U.S. In an international environment, parents' attitudes may play a big factor into students' motivation (Asmali, 2016). In addition, student age and future plans (i.e. students hoping to attend university in the U.S.) may play a large factor in their motivation to learn English. For young students, this level of motivation may not be present as they may not understand the relevance of the language learning to their lives. Students of mine have voiced "Why should I learn English if we speak Spanish here in Colombia?"

Conclusion

In this chapter, I have discussed how my personal and professional journey have led me to my research question, as well as some background on the context of the project described in this paper. In chapter two, I will provide a review of the literature related to the topic of research, including the literature pertaining to the English learner experience, science education in the elementary context, and finally of literature regarding strategies for teaching oral language in content classrooms.

CHAPTER TWO

Literature Review

Introduction.

In my many years of experience as a language teacher, guiding students in the development and proficient use of academic oral language has been a challenge. I've seen first hand that when students are learning a new language, they tend to quickly acquire common, social language, but struggle to learn and use more complex and specific language that is necessary in content classrooms such as science or social studies. This has led me to my research question: *What strategies could be provided to content and English as a Second Language (ESL) teachers to help scaffold oral language use for English Learners in the elementary content classroom?*

As a teacher educated in the United States now working in an international school abroad with an almost entirely monolingual/monocultural student body, my research and approach in this project will be largely tailored to similar learning environments, but my hope is that the strategies and ideas that I propose in this project could be used within any elementary content classroom that has a considerable population of English learners. In this chapter, I provide definitions pertinent to both U.S. school settings and international school settings in order to keep my scope and relevance open to educators working in either environment. I also provide a summary of the research relevant to my capstone topic and briefly introduce the relevance and importance of the work of this research project. This chapter will begin by providing a review of the literature pertaining to the English learner (EL) experience, of science education in the elementary/primary context,

and finally of literature pertaining to oral language teaching strategies, with a focus on scaffolding.

The section on the EL experience includes a definition of English learners and some demographics within the context of the U.S. as well as outside of the U.S. It additionally includes some statistics related to English learners around the world and about English learners in international schools (in particular those that follow a North American approach to teaching). This section also provides some theory and definitions regarding the second language acquisition process as well.

The next section of this chapter describes literature pertaining to science education in the elementary context, including relevant definitions and an in-depth look at the Next Generation Science Standards (NGSS). This section also explores literature pertaining to the language demands of these and similar standards in content classrooms.

In the final section, I review literature pertaining to strategies for teaching oral language in content classrooms, with a particular focus on scaffolding. This section of my paper informs the development of my capstone project by providing relevant research and information pertaining various strategies in teaching oral language to English learners. It provides definitions and information on connections between oral language and literacy, as well as various strategies for teaching oral language including the use of comprehensible input, revoicing, direct oral language instruction, direct vocabulary instruction, and the use of the students' native language to bridge understanding.

The English Learner (EL) Experience

This section reviews literature and data available related to the EL experience in the U.S. and worldwide. A review of the literature shows that many studies have been conducted on the demographics of ELs in the U.S. and these learners' academic performance in the U.S. public school system (Garcia & Frede, 2010; Office of English Language Acquisition (OELA), 2015; U.S. Department of Education (U.S. DOE, n.d.). Fewer studies have been conducted pertaining to English learners in the worldwide context. In order to fully engage in this discussion, this section will start out with a definition of the term English learner (ELs).

Definitions. In the U.S., national and state laws have played the most important role in defining the terms English Learner (EL) and English Language Learner (ELL). In 2015, the Every Student Succeeds Act (ESSA) provided a national definition for the term English Learner (EL). This definition replaced the previous term—Limited English Proficient (LEP)—used under No Child Left Behind (NCLB). According to ESSA (2015), an English Learner can be defined as:

> . . . an individual— (A) who is aged 3 through 21; (B) who is enrolled or preparing to enroll in an elementary school or secondary school; (C) (i) who was not born in the United States or whose native language is a language other than English; (ii) (I) who is a Native American or Alaska Native, or a native resident of the outlying areas; and (II) who comes from an environment where a language other than English has had a significant impact on the individual's level of English language proficiency; or (iii) who is migratory, whose native language is a language other than English, and who comes from an environment where a

> language other than English is dominant; and (D) whose difficulties in speaking, reading, writing, or understanding the English language may be sufficient to deny the individual— (i) the ability to meet the challenging State academic standards; (ii) the ability to successfully achieve in classrooms where the language of instruction is English; or (iii) the opportunity to participate fully in society. (ESSA, 2015, Section 8101(20))

This definition defines English Learners in the terms of the U.S. school system and does not take into consideration adult learners or early childhood learners (younger than 3). In addition, it speaks to what these learners are lacking, rather than the value they bring to the school system and to society. Another definition in the context of the U.S. by the National Council of Teachers of English (NCTE) (as cited in Price, 2018) characterizes English Learners as a "highly heterogeneous and complex group of students, with diverse gifts, educational needs, backgrounds, language, and goals" (p. 2). The current literature does not provide a common, worldwide definition for English Learner. This may be due to a number of factors, including the differing range of purposes for learning English in countries around the world, differences in national and regional requirements for reporting such definitions, and various requirements regarding tracking learner progress. For the lack of a consensus on a common worldwide definition of the term, I will give my own general definition of "English Learner" as: an individual who is learning English and who has not yet achieved proficiency in speaking, listening, reading, and/or writing.

Learners in the U.S. In a report by the U.S. Department of Education (U.S. DOE) (n.d.) called "Our Nation's English Learners," the Department documents how the population of ELs in the U.S. is growing. The report notes that between the 2009-10 school year and the 2014-15 school year, the population of enrolled ELs increased in nearly half of the states, along with increases of over 40 percent in five U.S. states (n.d.). This report includes data most recently collected in the 2014-2015 school year, when a total of approximately 4.8 million ELs were enrolled in U.S. schools (n.d.). The report also noted that ELs account for 10% of the total K-12 student population (n.d.). The report additionally includes information on U.S. requirements for reporting and tracking proficiency of English Learners enrolled in schools. It states that under the "Every Student Succeeds Act," states are required to annually assess the English language proficiency of English Learners, provide accommodations for ELs on state assessments, and develop accountability systems that include long term goals for ELs and measures of progress for these learners (n.d.).

Learners outside of the U.S. As stated earlier in the Definitions section, it is difficult to find information and statistics on English learners worldwide, largely due to the enormous scope and challenges in reporting such data. However, according to a report from TESOL 2014 (reported by the British Council), there are currently approximately 1.5 billion English learners worldwide of all ages. In addition, in a report of English learner test scores called the "EF EPI (English Proficiency Index)" written by English First (EF) (2011), an international education company that coordinates English teaching and various learning opportunities around the world, there will be 2 million

people learning English in the next decade. To further my discussion on the lack of consensus regarding English learning worldwide and of a common way to assess learners, I will include a quote from the EF EPI Index (2011):

> there is little measurement of the success of [the investment into the teaching and learning of English]. Within the English-teaching community, there is no consensus on the best ways to evaluate English proficiency, or indeed on the ultimate goals of English study. While most English teachers and students agree that communication is the primary objective, more work must be done to define target competencies and how each competency can best be evaluated.

The EF EPI Index (2011) expands on the questions of who learns English and why, how to assess and track learner progress. Since there are so many factors in play, expectations vary greatly. One factor that I will discuss is public versus private institutions. Public institutions tend to follow local or national expectations and standards for learning. Private institutions, such as schools identified as "international schools," typically follow the standards of a certain nation (i.e. British international schools, Canadian international schools, or international schools that follow American curriculum and standards). For the purposes of this study, I will discuss international schools that follow American curriculum and standards. According to Gillies (2001), there are approximately 180 American International Schools worldwide. These schools follow American curriculum and focus on language learning, values, global awareness, and volunteer service. The numbers of English learners enrolled in American international

school varies greatly from country to country and region to region. I will discuss international schools in more detail later in this chapter.

Motivations for learning English. Although attitude and motivation for language learning are believed to be the primary predictors of success and failure in language acquisition (Gardner, 1985), there are many other factors that affect foreign language learning performance and overall success. There are numerous reasons that individuals learn English, which, again, depends on many factors including age, location, career goals, family, etc. According to Asmali (2016), young learners' motivation to learn another language varies according to the factors of parental influence, positive attitudes towards the learning context and the teacher, and the impact of learning conditions. Asmali also notes that young learners are mostly intrinsically motivated to learn a language until the age of eleven, after which extrinsic motivation tends to take over (2016).

As noted in chapter 1, additional motivations for learning English are related to the place an individual lives, or wishes to live. Learners who are living in a community where English is the main language spoken will tend to be more motivated to learn English, out of necessity to communicate with others in the community (Guthrie, 2003). They may also have English proficiency requirements in school, for a job, or to attend college. On the other hand, learners who live in communities where English is not widely spoken may have less motivation to learn English. In these cases, individuals may be motivated by the desire to travel, to attend a school in another country, or for business purposes, for example. Students who are attending international schools where English is

the primary language of instruction are typically learning English because a) their parents understand the benefits of bilingualism and knowing English, and b) because they have educational and career aspirations for which knowing English is a major benefit or necessity (Guthrie, 2003).

Second language acquisition. This subsection will discuss literature related to several aspects of second language acquisition that are important to be aware of when teaching English Learners, including the phases of language acquisition and a discussion of Krashen's affective filter hypothesis and its effects on language acquisition.

BICS and CALP. The concept of Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP), founded by Jim Cummins, helps us understand the difference between the development of basic communication skills and academic language skills. According to Schulman (2018), the development of BICS takes approximately six months to two years to develop, as long as the learner is fully immersed in the target language and is provided with plenty of opportunities to use it. This type of language refers to the basic language used in social interactions and is not as cognitively demanding as CALP. Schulman (2018) notes that proficiency in CALP can take anywhere from 5 to 10 years to develop, depending on the language learner's circumstances and academic background. The skills required to reach CALP involve listening, reading, speaking, and writing about subject area content material (Schulman, 2018). It also includes higher order skills such as comparing, classifying, synthesizing, inferring, predicint, and evaluating language for content matter

(Schulman, 2018). For the purposes of the project described in chapter 3, the focus will be on guiding students towards CALP.

Phases of second language acquisition. Another essential consideration when discussing the process of second language acquisition is the phases that learners go through in their journey toward language proficiency. According to Krashen (1982) there are five predictable stages that all second language learners progress through in their path to proficiency. These stages are: the Preproduction/Silent Period, Early Production, Speech Emergence, Intermediate Proficiency, Advanced Proficiency. For the purposes of this study, the focus will be on supports in the preproduction/silent period, early production, and speech emergence phases, thus a deeper explanation of these three initial phases will follow.

The Silent period/Pre-production period. Students who are learning a new language typically go through what is called "the silent period" in their process of language acquisition. Typically receptive language (reading and listening) comes before productive language (speaking and writing) can occur. This means that, although a student remains silent and may not seem to be participating in discussions or may not be able to express their understanding, they are indeed taking in and processing what they are hearing (or reading). Students in this phase of language acquisition have about 500 words of receptive vocabulary; they can show their comprehension by using gestures and signals (Krashen, 1982). At this stage, Total Physical Response (TPR) methods, visuals, and pictures can help support student learning (Haynes, 2013). In addition, teachers can strategically place students in this phase with students of higher language proficiency

levels to help support them. It is of utmost importance that students in this phase feel supported and comfortable, rather than overwhelmed or "put on the spot" in the classroom.

Early Production. The next phase of second language acquisition is early production. At this stage, learners will develop both a receptive and active vocabulary of about 1,000 words (Krashen, 1982). Students in this stage can typically speak in one- or two-word phrases. They can memorize and use short language chunks but will often make errors in language forms (1982). Teachers can support students in this phase by asking yes/no questions, accepting short answer responses, and with the use of TPR, picture books and realia, visuals, graphic organizers, charts, and graphs to aid in the development of receptive language and vocabulary building (1982).

Speech Emergence. The third phase of second language acquisition is referred to as speech emergence. In this stage, learners possess a receptive and active vocabulary of around 3,000 words and can communicate in short phrases and complete, simple sentences (Krashen, 1982). They can ask questions, although these questions may not be grammatically correct, can read and comprehend short stories and other texts that are accompanied by pictures, and can begin to do some content work with support (1982). At this stage, teachers can expect students to be able to learn key vocabulary and concepts, understand simplified content materials, complete graphic organizers, understand and answer questions about charts and graphs in the content classroom, and have short conversations with their classmates (1982).

Krashen's Affective Filter Hypothesis. According to Krashen's theory as referenced by Singh (2008), learners who are "anxious, unmotivated, or lacking self-confidence will experience a mental block, which will impede language from being understood and retained" (Affective Filter, paragraph 2). Since students may be embarrassed or nervous to practice their language skills orally in a larger group setting, it is important to provide them opportunities to practice in a lower stress environment. For example, students can practice speaking with a partner (turn and talks, etc.) or in small groups (Wright, 2016). Focused instruction in oral language skills, language structure, and vocabulary that can be used in different scenarios is another way to ensure that students will feel successful in their interactions. In addition, Wright (2016) notes that it is important to be tactful when correcting errors in students' speech as this may also raise their affective filter and cause them to be afraid to speak up.

Summary of English Learner (EL) Literature. A review of the literature on English Learners shows that there are large numbers of English learners in the U.S. and around the world, although exact numbers and data on ELs on the global scale is difficult to find. These learners have numerous motivations for learning the language, including primarily family, place of residence of the learner, within or not within an English dominant community, and career and educational goals. The literature also shows that attitude and motivation has a great influence on success in language learning: how quickly learners acquire English and the level of proficiency they reach. Additionally, the research shows that teachers of ELs in different environments face unique challenges, which means they need to adapt their teaching in various ways to meet the needs of their

students. However, all educators can use knowledge of the process of language acquisition to inform their teaching practices.

Science Education in the Elementary Classroom

This section of the chapter reviews literature regarding Science education in the elementary/primary school context. First, a brief summary of recent history in science education is discussed, followed by a thorough review of the Next Generation Science Standards, which are the standards used for the purposes of this capstone project. Finally, connections between science and language demands are explored, providing further context and relevance for the project that will be described in chapter 3.

Science education in the U.S. Science education in the U.S. has changed greatly over the past 50 years. Most people who grew up in the 80s to early 2000s probably recall memorizing facts, formulas, and processes in their science classes. However, even in the 1980s, science education was beginning its reform. Instead of focusing on simply memorizing content, science education became a discipline focused on the marriage of science, technology, engineering, and mathematics (STEM), and, in the case of STEAM education, arts were also included in the mix. Bequette, et al. (2012) notes that since the second half of the 20th century, the National Science Foundation (NSF) has encouraged the incorporation of engineering and math with a comprehensive science curriculum. Bequette, et al. (2012) describes that the incorporation of technology in the balance led to the creation of the acronym STEM in the early 2000s.

Next Generation Science Standards (NGSS). The Next Generation Science Standards (NGSS, 2013) are a set of standards that were developed by states, along with

support from the National Research Council (NRC), the National Science Teachers Association (NSTA), the American Association for the Advancement of Science (AAAS), and others (NGSS). These standards have now been widely adopted in many states across the U.S. for science education in K-8th grade. NGSS includes standards that integrate science and engineering practices, cross-cutting concepts, and disciplinary core ideas.

Many of these standards, particularly the science and engineering practices standards, have a heavy importance placed on practices that involve communication with peers and presentation skills. For example, some of these standards include: Ask questions that can be investigated and predict reasonable outcomes based on patterns such as cause and effect relationships; use evidence (e.g., measurements, observations, patterns) to construct or support an explanation or design a solution to a problem; plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a question; respectfully provide and receive criticism from peers about a proposed procedure, explanation, or model by citing relevant evidence and posing specific questions; construct and/or support an argument with evidence, data, and/or a model (NGSS, 2013, Appendix F).

Connections between science and language arts standards. This section discusses the connections that can be made between science standards and language arts standards and related language demands.

In addition to the NGSS standards, Common Core language arts standards expect students to be able to comprehend and discuss informational texts. According to Wright

(2017), studies have shown that both science and content area language and literacy are neglected in early elementary. Wright (2017) describes a large-scale study observational study which found that elementary teachers spent on average only 2.3 minutes per day teaching science and 1.6 minutes reading aloud from informational texts. Wright (2016) notes that these figures correlate with low scores on 4th grade science standardized tests and the fact that students of this age demonstrate higher comprehension of literary texts than informational texts. Wright (2017) therefore posits that it is critical to provide quality science and well-rounded literacy instruction from a young age so that all students are prepared to meet standards in these areas.

According to Wright (2016), the better ELLs can speak and understand English, the better they can read and write it. Just as it is important to provide plenty of time for writing and reading in order to help students develop into proficient readers and writers, students need plenty of opportunities to develop their oral communication skills.

Summary of science education literature. This section of the chapter explored literature pertaining to science education in the U.S. including a brief history, discussion of science standards, and connections to language arts. The literature shows that there is a great connection between science standards and language arts standards, as well as high linguistic demands in the science classroom. The next section will look at specific strategies that can be used in the content classroom, in particular in the science classroom, to help meet these linguistic demands.

Oral Language Teaching Strategies and Scaffolds

The following subsections will provide a review of literature on various aspects of best practices in the teaching of English as a second (or foreign) language. These aspects include scaffolding, providing comprehensible input, direct oral language instruction, direct vocabulary instruction, teacher talk and verbal supports, and revoicing. I will also review a study on the value of the use of students' native language in combination with the target language in classroom instruction, or using what the author calls "code-switching."

Scaffolding. According to Vygotsky, as referenced in Safa et al. (2015), the zone of proximal development (ZPD) is the distance between a child's current development level and the level of potential development that could be achieved with guidance or in collaboration with more expert peers. Lantolf and Thorne (2015) consider this concept, along with mediation, to be directly related to the concept of scaffolding. In both notions, the focus is on the learner, while the control initially lies in the instructor, or person providing guidance, or the expert peer until the learner is eventually able to take over the task.

Scaffolding is defined by Larkin (2008) in the Encyclopedia of Educational Psychology as a "process in which support is provided to an individual so that he or she can complete a task that could not be completed independently. The support gradually is removed when the individual begins to demonstrate understanding of the task" (p. 863). Larkin (2008) notes that scaffolding begins by activating a learner's prior knowledge and builds off of it by adding a number of supports to the learning process. As students

become more independent with what they are learning, these instructional supports disappear.

Comprehensible input and oral language. One of the primary principles in working with language learners is ensuring that we are providing language that is comprehensible and therefore accessible to them (Krashen, 1982). Wright (2016), outlines some ideas for providing comprehensible input and how to scaffold language during discussions in order to make them accessible for ELLs. First, Wright discusses the importance of wait time because ELLs may need extra time to process or translate in their head before they can respond (2016). The author also suggests using a slower rate of speech, using gestures and facial expressions to aid in understanding, the importance of enunciating words well, using a normal voice volume (not overly loud or quiet), and using simple sentence structures (2016). In addition, she notes that it is important to emphasize and repeat key vocabulary and sentence structures to help model language, as well as to paraphrase or repeat things in a different way when ELs are not understanding (2016). The author additionally recommends avoiding cultural references that would be unfamiliar to the language learners as well as idioms.

Direct oral language instruction: language structures and vocabulary. According to Wright (2016), teaching oral language skills is essential to student success in literacy and fully engaging with the content, no matter the student's language proficiency level. In order to be successful, students need to be provided with direct instruction on the language structures and vocabulary necessary to engage with the language of each content area.

Language structures. English Learners learn language structures in a variety of ways. The teacher's modeling of structures plays an important role in students' development of language (Wright, 2016). Students additionally need to be provided with opportunities to practice structures that they have learned. One way teachers can support students in learning appropriate language structures by providing sentence frames either verbally or in writing (Wright, 2016). Teachers additionally need to be aware of the complexity of the sentence structure that they are using with students and their exposure to such structures. They can scaffold the complexity depending on the students' language proficiency level. For example, teachers should use simple sentence structures (subject, verb, object) when speaking to emergent learners whenever possible (Wright, 2016).

Vocabulary. There are three different tiers of vocabulary that range from basic and common to academic and less common. According to Beck, et al. (2002), these tiers of words can be described as follows:

- Tier One: Words that are basic and that rarely need an instructional focus (e.g., *leaf, rock, ocean*).
- Tier Two: Words that appear with high frequency, across a number of domains, and are crucial when using academic language (e.g*., conclusion, constant, analysis*).
- Tier Three: Words that are not frequently used and are generally limited to a specific field of study (e.g., *velocity, exoskeleton, sedimentary).*

According to Mcglynn (2017), when planning for instruction, it is important to choose vocabulary to pre-teach, including a mix of Tier Two and Tier Three words. Although

Tier Three vocabulary includes academic words that are specific to content classes, Tier Two words are powerful tools that can be used in a variety of contexts. For this reason, it is important to include these when planning. These are key in ensuring students can communicate their ideas about the content. In Chapter Three, strategies for teaching Tier 2 and 3 vocabulary will be explored further.

Revoicing. According to Ferris (2014), revoicing is a tool to engage learners in academic discussions. It involves repeating back all or part of what a student has contributed to a discussion but additionally asking a question to verify that they have interpreted the utterance correctly. This allows the teacher to expand or clarify student ideas. Providing the opportunity for students to be aware of the interpretation of their speech and reconstruct their thinking. Through revoicing, teachers model appropriate language use and guide students to clarify their ideas orally. This strategy can also be used when students respond in their first language, with the teacher revoicing their comment in English, aiding in the transfer of concepts from one language to the other.

Code-switching. In a study by Lee (et al.), Lee explores the use of a combination of language learners' native language and target language in classroom instruction. Lee refers to this combination of language in the classroom as code-switching (CS) and posits that the use of CS in the classroom has benefits for student learning and motivation (2017). An additional study by Hopewell (2019) found that the use of this type of linguistically flexible teaching practice helps students develop metacognitive and metalinguistic awareness; it helps students to understand how what is known in one language contributes to what is known and understood in the other.

Summary of Literature on Teaching Oral English. A summary of the literature on teaching strategies for teaching oral language in the classrooms shows that there are numerous ways to support students with their use of oral language in the classroom. Teachers of English Learners need to understand the unique needs of ELs and ways to ensure that content is accessible, such as providing comprehensible input and various types of scaffolds to help them be successful in using the language. It is important for teachers of ELs to be knowledgeable of these strategies and how they can be best implemented, depending on a learner's current stage of language acquisition.

Conclusion

The purpose of this literature review was to begin to answer the question: *What strategies could be provided to content and English as a Second Language (ESL) teachers to help scaffold oral language use for English Learners in the elementary content classroom?* The research discussed in this literature review has provided an understanding of ELs, the language demands within science education, and principles for teaching oral language in the content classroom, which will be necessary to develop this capstone project.

In Chapter Three, I provide more information about my capstone project, including various teaching resources and the science curriculum unit that I adapted, which provides scaffolds for EL oral language development. Although much research has been carried out in the field of English Learning and language acquisition, in Chapter Three, I describe how my project provides useful information and resources for educators

who work with ELs and how they can support them in their oral language development to ensure their success in reaching content area standards.

CHAPTER THREE

Project

Introduction and Rationale

As an elementary homeroom teacher in an international school setting, where each of my students is an English learner (EL), one of the most challenging aspects of my job is making content accessible to my students. Without direct instruction in oral language skills, they simply do not have the tools to communicate with me or with their peers about the complex content of classes like science, social studies, and math. When planning my instruction, I have to manage the expectations of North American curriculum and standards alongside the specific language learning needs of my students. I often struggle with the question of what to do when the curriculum's lesson objectives and demands are not addressing the language needs of my students and end up having to create lesson extensions or adapt the lessons to be more appropriate for my students' current language development level. My literature review addressed best practices in scaffolding oral language production for English Learners (ELs) in the content classroom. With these best practices and methods in mind, I am better able to address my research question, *What strategies could be provided to content and English as a Second Language (ESL) teachers to help scaffold oral language use for English Learners in the elementary content classroom?*

The purpose of this project is to provide curriculum and resources that can be used by classroom and ESL support teachers to best support English Learners in the content classroom. Although many of these resources address a specific science unit and

set of standards (NGSS, 2013), the oral language scaffolds and resources I provide are meant to be useful not only within that unit, but for any early primary content class, specifically K-3rd grade.

Project Setting and Participants

This project took place in an international school setting in Colombia, where the vast majority of students speak Spanish as their first language, meaning that they could be identified as English Learners. The school serves approximately 850 students from 1 year old through 12th grade and holds a high level of prestige in the community. The cost of tuition is the equivalent to approximately 6,000 US dollars annually. This means that only students who come from high socio-economic backgrounds can afford to attend. However, a small number of students are the children of school staff, who are typically from middle class backgrounds. The majority of staff are Colombians, but the school also employs approximately 15 foreign hired teachers and administrators from the United States and Canada.

Due to this being a small, private institution, I cannot provide specific demographic information about English proficiency level or special needs. The school does not administer the World-Class Instructional Design and Assessment (WIDA) or any other standardized English proficiency assessment. The school labels itself as bilingual. Students receive the majority of classes in English, especially in the primary section,1st through 5th grade. Students in middle and high school have fewer classes that are given in English. There is only one designated English support teacher in the entire school, who serves middle and high school.

The school serves a number of students with special needs, including students on the autism spectrum, some of which have part or full time teaching assistants assigned to them. However, specific demographic information has not been provided to school staff regarding special needs students. Students with special needs are provided with support from several learning support teachers along with their classroom teacher. Staff work closely with families and external experts, such as therapists, to meet students' individual learning needs.

This project was carried out in a third grade classroom in a private school in Colombia. Although the school does not provide a language proficiency leveling system, based on personal observations and those of colleagues working with students of this age, most third grade students at the school tend to have a low to intermediate proficiency level in English; in other words, they are in the Speech Emergence phase or beyond (Haynes, 2013). Because students are in their third year in a language immersion setting, during which the majority of instruction is provided in English, they are generally beyond the Silent Period and Early Production stage (Haynes, 2013). As mentioned in Chapter Two, this means that they are able to have simple conversations with their classmates in English and can now more easily access content material and vocabulary, with teacher support (Haynes, 2013).

Although students may appear to have achieved a more advanced level of proficiency in English by this point in their education, the level of complexity of their proficiency may appear more advanced than it really is. According to Schulman (2018), Cognitive Academic Language Proficiency (CALP) takes at least 5 to 7 years to really

develop the academic language at the cognitive level to identify students as proficient. Since students in third grade have only been immersed in the English language in the school environment for two years at this point, the language that they are using is likely mostly basic social language (Schulman, 2018). For these reasons, in order to ensure students can meet the demands of content area standards, it is of utmost importance that the teacher provides plenty of scaffolds to support students and ensure that what they are learning is accessible to them at their current language proficiency level.

The intended participants of this project include the third grade homeroom teachers, along with the teaching assistants for each class along with any support staff who may support students in science class. Although the project will be carried out with the specific needs of the students in the class setting, the idea is that the science unit plan can be used by other third grade science educators; additionally, the oral language scaffolding resources can be used by any elementary content teacher who works with English learners.

In the 2018-2019 school year, the school that is the setting of this project adopted a set of standards for science instruction called Next Generation Science Standards (2013). As stated in Chapter 2, these standards, unlike traditional standards for science that focus primarily on content, incorporate science and engineering practices, analysis and interpretation of data, asking and answering questions, cross-cutting concepts, which are concepts that can be drawn across scientific areas such as patterns, cause and effect, systems and models, etc., communicating and presenting findings, and more (NGSS, 2013). These standards seek to help develop not only knowledge of specific content in

students, but scientific behaviors. Students who need to *analyze* information, *ask and answer questions* with peers or adults, and *present* findings need to have the oral language skills in order to do this. They need to understand the vocabulary related to the content and in order to form the language they will use, they need knowledge of pertinent sentence structures, they need an understanding of skills for presenting in the target language including use of tone, the intonation of phrases, and of pronunciation of complex and scientific language.

The school additionally utilizes a set of language arts standards called the Ontario Curriculum, Grade 1-8: Language (The Ontario Curriculum, 2006). Within these standards, teachers are expected to teach and assess skills in reading, writing, and oral language. The oral language skills outlined in this curriculum are closely tied to reading and writing skills and include the ability to listen to understand, speak to communicate, and reflect on oral communications skills and strategies (The Ontario Curriculum, 2006). I utilized these standards to help guide my development of the scaffolds for this project.

Although the school has adopted a set of standards, it does not have a set curriculum it uses that closely matches with the Next Generation Science Standards (NGSS) for each grade level. The school has purchased a set of kits called FOSS kits, which includes resources that are closely but not exactly tied to the current NGSS standards. For this reason, I developed a science unit that utilizes the resources our school has available and tailors to the specific language learning needs of students at the school.

Project Overview

The purpose of this capstone is to develop a third grade science unit that includes oral language supports for English learners. The name of this unit is Plant and Animal Structures. Many of the lessons in this unit are adapted from other teachers' science units on the website Better Lesson (2018), a platform through which educators can share their lessons with other teachers. I have found this resource to be helpful in finding ways to incorporate all of the NGSS standards within units that I plan (Better Lesson, 2018).

This unit was chosen because there was a need for a developed unit for third grade that covers life science standards. Additionally, it is a unit with potential to create hands on, experiential learning experiences, which will promote engagement and deepen understanding of the content and standards. In this unit, students will explore plant and animal structures, study and design appropriate habitats for various living things, and observe and draw conclusions about plant and animal adaptations.

After studying the Next Generation Science Standards and The Ontario Curriculum's oral language standards, I discovered that the greatest needs that I would address related to oral language for this project are: vocabulary development, sentence structures needed to ask and answer questions, sentence structure to make observations and comparisons, sentence structure to make hypothesis/predictions, and sentence structure for presenting findings (NGSS, 2013; The Ontario Curriculum, 2006).

For this project, I created a portfolio of resources in the form of a Google Folder that includes the science unit plan and a variety of oral language scaffolding resources. I decided to organize the resources in a Google Folder because of the ease of sharing it

with others through a simple link. Additionally, specific pages from the documents in the folder can be selected and saved or printed as needed.

Upon the completion of this Google Folder of resources, I scheduled a team meeting with my third grade team, consisting of teachers and assistants to discuss the unit plan and resources I had created. Next, I was asked to present to the rest of the primary teaching team, in which I shared the details of my capstone project and the resources I had created. In this meeting, I outlined best practices in teaching English learners in content classes and highlighted the importance of providing scaffolds for oral language (Larkin, 2008). I also commented on how oral language is closely tied to literacy skills and that English learners of various proficiency levels need to be provided with support in order to meet the rigorous academic standards that our school upholds (Wright, 2016). I demonstrated how the scaffolding resources I developed can be adapted to any primary classroom and encouraged all of the teachers I work with to utilize the materials when planning their content lessons. The Google Folder of resources was shared with all the teaching team in the primary section of the school in order to ensure that everyone can have access to them at any time.

Research Theories and Project Framework

As was discussed in Chapter Two, one of the primary theories that guide this work is Vygotsky's theory of Zone of Proximal Development (ZPD). ZPD +1 is an instructional technique in which a learner is challenged to learn a skill that is one step higher than his or her current ability level (Ketterer, 2008). Another closely related theory guiding this work is Vygotsky's social constructivist theory of learning (Constructivism,

2009). The social constructivist theory states that individuals use interactions between themselves and others to make connections and create new learning (Constructivism, 2009).

The framework of this project will be built around various strategies of teaching oral language that were described in Chapter Two, including scaffolding, direct oral language instruction in language structure and vocabulary, revoicing, and code-switching. As noted in Chapter Two, scaffolding is defined by Larkin (2008) in the Encyclopedia of Educational Psychology as a "process in which support is provided to an individual so that he or she can complete a task that could not be completed independently. The support gradually is removed when the individual begins to demonstrate understanding of the task" (p. 863).

Direct oral language instruction includes both direct instruction in language structures and vocabulary needed to communicate about the content (Wright, 2016). According to Wright (2016), the teacher's modeling of structures plays an important role in students' development of language. In addition, as mentioned in Chapter Two, Mcglynn (2017) notes that when planning for instruction, it is important to choose vocabulary to pre-teach, including a mix of Tier Two and Tier Three words. As a reminder, Tier Two words can be described as words that appear with high frequency, across a number of domains, and are crucial when using academic language (e.g., *conclusion, constant, analysis*) (Mcglynn, 2017). Tier three words are those that are not frequently used and are generally limited to a specific field of study (e.g., *velocity, exoskeleton, sedimentary) (*Mcglynn, 2017). A combination of Tier 2 and Tier 3 words

will be identified and used within the unit that goes along with this project and strategies for how to pre-teach these will be included in the resources folder.

The next oral language strategy that will be utilized in this project is revoicing. As was noted in Chapter Two, revoicing is a tool to engage learners in academic discussions (Ferris, 2014). Revoicing involves repeating back all or part of what a student has contributed to a discussion and additionally asking a question to verify that they have interpreted the utterance correctly (2014). This allows the teacher to expand or clarify student ideas and provides the opportunity for students to be aware of the interpretation of their speech and reconstruct their thinking (2014). Through revoicing, teachers model appropriate language use and guide students to clarify their ideas orally (2014). This strategy is another way to help make connections with their first language; when students respond in their first language, the teacher can revoice their comment in English, which aids in the transfer of concepts from one language to the other (2014).

The final strategy utilized in this project is code-switching. As described in chapter 2, in a study by Lee (et al.), Lee explores the use of a combination of language learners' native language and target language in classroom instruction. Lee refers to this combination of language in the classroom as code-switching (CS) and posits that the use of CS in the classroom has benefits for student learning and motivation (2017). An additional study by Hopewell (2019) found that the use of this type of linguistically flexible teaching practice helps students develop metacognitive and metalinguistic awareness; it helps students to understand how what is known in one language

contributes to what is known and understood in the other. Code-switching in the context of this project will be in the form of a list of recommendations for use in the classroom.

This project was developed with these teaching strategies in mind, while also being closely aligned with the language demands of the Next Generation Science Standards (2013) and Ontario Language Curriculum standards for English Language Arts (2006). By having a clear vision of these standards and their linguistic demands, I was able to compile various teaching strategies that would aid in the oral language development of students while also ensuring students could meet the expectations of these rigorous standards.

Project Timeline

The development of this project began in May of 2020, when I was teaching first grade but beginning to plan for the coming school year when I would move to third grade. I studied the Next Generation Science Standards (NGSS) that are specific to third grade as well as work that other educators had done in developing science units that address these standards. I began to develop a life science unit related to plants and animals and looked closely at what the language needs would be of students in such a unit. In the beginning of June, I began to look at how I could align the Ontario Curriculum's standards in oral language with NGSS standards.

My goal for the last two weeks of June was to have an outline for the unit, in which I would have a list of the science and language arts standards that would be addressed in each lesson, as well as an overview of what each lesson would entail. I wanted to have a very clear idea of what the specific language demands would be for

each portion of the unit. By the end of June of 2020, I began working on the oral language scaffolding resources. I developed a list of vocabulary that would need to be pre-taught and reinforced for each lesson. Along with this, I included resources that would help in the development of vocabulary in any classroom, especially Tier 2 and Tier 3 words.

Next, I developed resources for teaching sentence structure. Some of these resources include instruction on revoicing, in which the teacher models appropriate language for the context, written sentence frames to provide to students (either for the whole class to see or to give to students for small group or partner discussions), graphic organizers to help students organize and record new vocabulary, and a presentation on ways to strategically use code-switching when possible to help students build connections between their languages. These resources were compiled in a Google Folder in organized and labeled files.

By mid-July, the unit plan was completed using the Understanding by Design [UBD] unit planning method. The document for the unit plan was also added to the Google Folder for this project. Within this document, I clearly outlined each lesson, including the relevant NGSS (2013) standards and language arts standards addressed in each lesson, as well as any materials needed to carry out the lesson plans.

In early August, I scheduled a meeting with the third grade team and the principal at my school to discuss the unit plan and the resources I had created for the unit. After that meeting, I was asked to present my oral language scaffolding resources to the entire primary section in a professional development workshop and shared the resource folder

with teachers and assistants that work with grades 1 through 5. In that meeting, I discussed the various levels of language proficiency and asked my colleagues to identify approximately at what level the majority of their students were at. I explained to them that knowing our students' language proficiency levels can help us to better plan our lessons and to better understand what we can realistically expect of our students. I encouraged teachers to utilize the resources I had created when planning for any content class in order to meet the language needs of our students.

Conclusion

The purpose of this chapter was to present an overview of my capstone project and to explain its rationale. In this chapter, I described the setting and participants of the project, made connections with the theories and frameworks that guided my project, and discussed the timeline for its completion. The outcome of the project was ultimately a Google folder of resources, including a science unit plan that incorporates oral language teaching supports as well as templates for unit planning, examples of student work, various resources for planning the teaching of vocabulary, and oral language supports that can be utilized by other educators to support their language learners. The following chapter will be a reflection of the process of the completion of my capstone project and will answer the question: *What strategies could be provided to content and English as a Second Language (ESL) teachers to help scaffold oral language use for English Learners in the elementary content classroom?*

Chapter Four

Conclusion

Chapter Overview

The purpose of this Capstone project was to explore the following research question: *What strategies could be provided to content and English as a Second Language (ESL) teachers to help scaffold oral language use for English Learners in the elementary content classroom?* In order to answer this question, I reviewed literature related to English Learners, the language demands within science education, and principles for teaching oral language in the content classroom. After reviewing the literature on these topics, I designed a project that would address the unique needs of young English learners in the content classroom, with a focus on oral language demands in science classrooms.

This final chapter summarizes the overall findings of this Capstone, which includes major learnings throughout the process, a review of the literature discussed in Chapter two, implications and limitations of the project, as well as recommendations to others. Additionally, this chapter explains how others can access the project resources and the benefit of my project to the teaching profession. In this chapter I provide an answer to my research question and reflect on my process of researching and developing the resources that make up my project.

Reflection on the Capstone Learning Process

This project developed based on my experiences of working with language learners in various settings, through which I was able to fully understand the challenging

oral language demands of content classes. Because of this, I knew that I needed to find a way to advocate for the unique oral language needs of language learners. I decided to use this capstone project to discover how I could help myself and other elementary teachers make that language accessible for them. The process of developing this project has been challenging on many levels, but I am proud of what I have been able to accomplish and the things I have learned and can now share with others.

One of the primary points I discovered through the development of my capstone project is that my project isn't and hopefully won't ever really be "finished." The resources I created are, and will continue to be, a work in progress. I am well aware that, although I have discovered a number of teaching strategies and resources that will undoubtedly be useful to other teachers, I am also aware that I still have much to learn about teaching oral language in content classrooms. I have created a resource that I hope I will continue to add to as I continue my journey of research on this topic. I additionally hope to work with other colleagues who can share their experiences, learning, and expertise through additional resources that can be compiled in this shared, public folder.

Another major learning through this process is that teachers cannot possibly incorporate all necessary language supports into a unit plan. When I was creating my third grade science unit, I struggled to include all of the elements I had researched into my lessons. I realized that, although there are certain elements of supporting oral language development that are much easier to plan for and integrate into unit plans for content classes, such as considering language objectives related to lessons, planning for vocabulary instruction, and considering which sentence frames could help support

students in communicating their ideas related to the content, there are other considerations that need to be addressed in the form of professional development.

This experience helped me realize that, in order for teachers to best support oral language development for English learners, it is essential to provide professional development regarding strategies that teachers can use every day, in any class that they teach. By providing professional development that instructs educators on how to use revoicing and modeling effectively, students will be much better equipped to appropriately use language related to a certain content area topic. Additionally, if teachers are exposed to the benefits and ideas for how to use code switching strategically in the classroom, students will be able to build connections between their languages and more easily comprehend content. Finally, teachers need to learn how to effectively use sentence frames to ensure that students are able to express their ideas about content when engaging with their peers and their teacher.

As an experienced educator, I know that there are many moments in our classrooms that simply cannot be planned and that are done in the moment. Our interactions with students and their own ideas can and should guide where discussions and even the direction our lessons go. For this reason, a teacher who has knowledge of how to implement the aforementioned strategies in any lesson, even "on the fly," will be better equipped to provide the support that language learners need and ensure that learning experiences are truly authentic and tailored to that class.

Through my process, I realized that the actual content of the unit I created was not as important as I had originally thought. Although a big part of what I created for my

project was an adapted third grade science unit, including a number of documents essential to teaching that unit, I became aware of the fact that what really mattered was the process I went through of thinking through each lesson and its language demands, such as the vocabulary and sentence structures that students would need in order to access and communicate their ideas about the content effectively. The process of creating that unit helped me to fully recognize how important it is to consider how language will be taught in every lesson and unit that teachers plan.

Because of my realizations, I decided it was necessary to begin to create additional resources that any teacher can use to learn more about strategies for teaching oral language. I made several well organized and user-friendly slideshow presentations to teach others about how to use code-switching, revoicing, and sentence frames in their classrooms. In addition, I created examples of anchor charts that anyone can access and adapt to their needs, including sentence frames according to type of discourse: ways to agree or disagree, ways to provide evidence, how to clarify, and more. Finally, I put together a document including suggestions for teaching vocabulary related to content areas and a template for planning vocabulary instruction across a unit. Although the resources were created with the specific needs of my current school in mind, my hope is that they will be useful in any school setting where language learners are present.

Revisiting the Literature

Throughout the process of developing this capstone project, I have reviewed countless articles, passages of texts, and websites to find out as much as I can about the best strategies for scaffolding oral language for ELs in content classrooms. Although all

of these texts have influenced the project in some way, there are several that have had the greatest impact on my work. The primary concepts that led to the development of my project were those of the zone of proximal development and scaffolding.

In my research on the English Learner experience, one of the primary concepts that stands out to me and that guided the development of my project was Vygotsky's concept of the zone of proximal development (ZPD) and the related concept of scaffolding. As stated in Chapter Two, according to Vygotsky, as referenced in Safa et al. (2015), the zone of proximal development (ZPD) is the distance between a child's current development level and the level of potential development that could be achieved with guidance or in collaboration with more expert peers. Additionally, Lantolf and Thorne (2015) consider this concept, along with mediation, to be directly related to the concept of scaffolding. In both notions, the focus is on the learner, while the control initially lies in the instructor, or person providing guidance, or the expert peer until the learner is eventually able to take over the task.

These two concepts were what essentially guided me in my research and development of scaffolding resources that can be utilized by teachers to support their students' oral language development. Teachers need to meet students at their current level, or their ZPD, in order to ensure that they can be successful in their oral language production. Using the resources I created for this project will help educators to support their students and meet their specific needs. Scaffolds provide students with just the right amount of support to meet language and content goals.

General Implications

After launching this project, I presented my resource folder to the elementary teaching staff of my school during orientation week. I briefly summarized my process and learnings and the importance of planning for language instruction in all classrooms. In addition, I presented about the teaching strategies I had researched and we had a conversation about how my colleagues might utilize them in their own classrooms. Finally, I walked them through how they can look back and access the information I had presented about and the various resources that were available in the folder. I invited them to try out the resources with their own students and to provide feedback so that we can together make improvements on them.

My hope in creating and sharing these resources is that other teachers will begin to implement some of the strategies and frameworks I researched in order to support the oral language development of all of our students. I am confident that helping other educators to understand the importance of having a mindset of teaching language alongside content will help language learners be more successful in content classrooms. Language instruction can be partially thought out in our lesson planning, but it is also essential that teachers continually improve their skills in teaching language in all classes across the curriculum. The strategies and resources that I have shared through this capstone project are just the beginning of a learning process that I, and hopefully many other teachers, are embarking on.

Limitations

Although the development of this capstone project was successful, there were a few limitations that affected its development. These limitations include a lack of

opportunities to receive feedback directly from my colleagues and to test out the resources with students and improve upon them before the submission of this capstone, a lack of control over the implementation of the resources I created, and the difficulty in implementing some of the resources in the current teaching environment, due to the COVID-19 pandemic.

First, since the resources were created during the months of summer vacation, I didn't have the opportunity to test out the resources in my own classroom, nor were my colleagues able to do so, before submitting them for the capstone. I would have benefited from more time and opportunities to have others consider my ideas, try them out with students, and to meet and improve them for the future. Typically when creating resources, teachers have more opportunities and time to share ideas with colleagues before submitting them or implementing them in a school setting. Thankfully, these considerations are addressed in the future steps section, as I plan to work with others to revise and add to the resources after testing them out, receiving feedback, and doing further research.

Another limitation of this project is a lack of control over the implementation of resources. Any use of the resources I created depends on other teachers' choice. Although the resources I created were shared with my colleagues and presented in a workshop at my school, it is ultimately up to other teachers what decisions they make with their instructional time. These considerations will ultimately affect the overall impact of my project.

Finally, these resources were created during a global pandemic, when much of the world is operating under a distance learning or blended learning format and it is uncertain how long this way of teaching will continue. Because of this, I'm sure that some of the resources will prove difficult to implement in a virtual classroom. It will take considerable time and consideration to see how these resources could be adjusted for non-traditional teaching scenarios.

Future Steps and Recommendations

The future steps for my project plan are to begin to personally implement the resources and teaching strategies discovered in the process of my research and project creation, as well as to work with my colleagues in their own implementation of oral language teaching strategies. I hope to work with my colleagues, receive their feedback on the effectiveness of the resources, and use that feedback to make revisions. As mentioned earlier in this chapter, my greatest hope in creating this project is that I have inspired others to embark on a journey in implementing strategies and resources to support students in their oral language development needs.

In the coming years, I plan to continue to research further methods for effective language teaching in content classes and will add additional resources to the folder I have created as I find them. I additionally hope to present more professional development on the topic of this capstone project to my colleagues in the future. Because of the constraints of time and circumstances before submitting this capstone project, the resources I have created are still in a process of development. However, I am excited to

have launched an ongoing project that will help myself and others continually learn new teaching skills that will ultimately help us better support students.

Based on my learning, I recommend that other educators of English Learners continue to research further methods for supporting their students in their oral language development across the curriculum. Students need for their teachers to be ongoing learners that always strive to find the best ways to meet their unique needs. The challenging oral language demands of today's content area classes make it essential that teachers provide scaffolds that make that language accessible and allow language learners to effectively communicate their ideas in the context of science and other content area classes.

Communicating Results

The overall outcome of this project was the launching of a publicly shared Google folder of resources to support language learners in their oral language production in content area classes. This folder includes four sub-folders which include resources for vocabulary development, teaching strategies that can be implemented to support the development of language structure, examples of anchor charts that others can take or adapt to their own classroom needs, and finally a folder including a grade 3 science unit and accompanying documents which utilizes many of the resources I included in other folders. This folder is decidedly a work in progress as I have much more research to do in order to ensure that these resources continue to grow and improve over time. This folder can be accessed in the Hamline University Digital Commons.

Benefits of the project

My hope is that this project will serve as a resource to other teachers who work with English Learners in a variety of settings. The folder of resources that I have created as my project is a work in progress that I hope will continue to expand and improve over time, both with my own research and revisions and with the collaboration of others. I created this project because I knew that I needed to begin to discover ways to support students in their oral language production in content classes like science. Although the specific context of my school was what I had in mind during the development of this project, I have worked to ensure that the resource folder can be easily adapted for any teaching environment that serves EL students. This is why I have not only shared these resources with the primary staff at my school in Colombia, but I have shared it with the public on Hamline's Digital Commons web page.

Summary

This chapter has provided a reflection on the overall capstone process. In Chapter Four, I included major learnings throughout the process, especially that this project is not complete but rather an ongoing endeavor that I plan to improve on in the coming years with the collaboration of my colleagues. This chapter additionally provided a final review of the literature relevant to the project's development, implications and limitations of the project, as well as future steps and my recommendations to others, based on my learning throughout the capstone development process. Additionally, this chapter explained how others can access the project resources and the benefits of my project to the teaching profession and especially to English Learner education.

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